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coupled to the elongate catheter body, and having a first non-penetrating position and a second tissue penetrating position; and  
an actuator member disposed proximate the distal portion and operably coupled to the tissue penetrating member, for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions, the actuator adding energy to the tissue penetrating member as the tissue penetrating member moves from the first position to the second position.

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67. (Amended) An intravascular therapeutic catheter as in claim 57 wherein the catheter body has a proximal portion and further comprising:

a fluid delivery lumen located in the catheter body extending from the proximal portion to a position proximate the tissue penetrating member for delivering a fluid to the location of the tissue penetrating member.

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70. (Amended) An intravascular therapeutic catheter as in claim 57 wherein:

the tissue penetrating member is adapted for motion about a pivot point between the first non-penetrating position and the second tissue penetrating position; and  
the second position is defined by maximum storage of energy in the tissue penetrating member thereby defining motion over a limited distance.

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74. (Amended) An intravascular therapeutic catheter comprising:

an elongate catheter body having a distal portion;  
a tissue penetrating member disposed proximate the distal

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portion, operably coupled to the elongate catheter body, and having a first non-penetrating position and a second tissue penetrating position; and  
an actuator member disposed proximate the distal portion and operably coupled to the tissue penetrating member, for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions in a direction substantially non-parallel to the distal portion of the catheter body, the tissue penetrating member releasing stored energy as the penetrating member moves from the first position to the second position.

75. (Amended) An intravascular therapeutic catheter as in claim 74, wherein the catheter body includes a constraining lumen and the first position of the penetrating member is a constrained position where the tissue penetrating member is located within the constraining lumen, and wherein the second position is an unconstrained position where the tissue penetrating member is not constrained by the constraining lumen.

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78. (Amended) An intravascular therapeutic catheter of claim 74 wherein:  
the tissue penetrating member is adapted for motion about a pivot point between the first non-penetrating position and the second tissue penetrating position; and  
the second position is defined by complete release of the stored energy thereby defining motion over a limited distance.

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82. (Amended) An intravascular therapeutic catheter comprising:  
an elongate catheter body having distal portion, and having an axis;

a tissue penetrating member disposed proximate the distal portion operably coupled to the elongate catheter body and having a first non-penetrating position and a second tissue penetrating position and having a pivot point; and

an actuator member disposed proximate the distal portion and operably coupled to the tissue penetrating member, for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions about the pivot point in a direction substantially non-parallel to the distal portion of the catheter body.

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83. (Amended) An intravascular therapeutic catheter as in claim 82, wherein the catheter body includes a constraining lumen and the actuator member moves the tissue penetrating member from the constraining lumen within the catheter.

86. (Amended) An intravascular therapeutic catheter comprising: an elongate catheter body having a distal portion and an axis;

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a tissue penetrating member having a tissue penetrating tip disposed at an angle relative to the axis, the angle opening in a proximal direction and being of no more than approximately 90 degrees, the tissue penetrating member being disposed proximate the distal portion and operably coupled to the elongate catheter body and having a first non-penetrating position and a second tissue penetrating position; and

an actuator member disposed proximate the distal portion and operably coupled to the tissue penetrating member, for moving the tissue penetrating member from one of the first or second positions to the other of the first or

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Cancel second positions in a substantially transverse path with respect to the axis.

91. (Amended) An intravascular therapeutic catheter comprising:  
an elongate catheter body having a distal portion and an  
axis;

a tissue penetrating member having a tissue penetrating tip  
disposed at an angle relative to the axis, the angle  
opening in a proximal direction and being of no more  
than approximately 90 degrees, the tissue penetrating  
member being disposed proximate the distal portion and  
operably coupled to the elongate catheter body and  
having a first non-penetrating position and a second  
tissue penetrating position; and

D8 an actuator member disposed proximate the distal portion and  
operably coupled to the tissue penetrating member, for  
moving the tissue penetrating member a limited distance  
from one of the first or second positions in a  
direction substantially non-parallel to the catheter  
body to the other of the first or second positions.

D9 93. (Amended) An intravascular therapeutic catheter as in claim  
91, wherein the actuator member moves the tissue penetrating  
member along a lateral path with respect to the axis of the  
catheter body.

D10 97. (Amended) An intravascular therapeutic catheter as in claim  
91, wherein the tissue penetrating member is cooled.

D11 103. (Amended) A method for treating cardiac tissue comprising  
the steps of:

providing an intravascular therapeutic catheter having an  
elongate catheter body, an actuator and a tissue

penetrating member having a tissue penetrating tip disposed at an angle relative to the axis, the angle opening in a proximal direction and being of no more than approximately 90 degrees, the tissue penetrating member being operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

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navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and  
adding energy to the tissue penetrating member to move the tissue penetrating member from the first position in a direction substantially non-parallel to the catheter body to the second position.

110. (Amended) A method for treating cardiac tissue comprising the steps of:

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providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and  
releasing energy from the tissue penetrating member to move the tissue penetrating member in a direction substantially non-parallel to the distal portion of the catheter body from the first position to the second position.

116. (Amended) A method for treating cardiac tissue comprising the steps of:

D13 providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a pivot point, a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions about the pivot point in a direction substantially non-parallel to the distal portion of the catheter body.

117. (Amended) A method for treating cardiac tissue as in claim 116 wherein the catheter body includes a restraint lumen and the tissue penetrating member is restrainable in the restraint lumen; and

wherein the step of moving the tissue penetrating member further comprises moving the tissue penetrating member from the restraint lumen whereby the tissue penetrating member moves from one of the first or second positions to the other of the first or second positions about the pivot point.

120. (Amended) A method for treating cardiac tissue comprising the steps of:

D14 providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member having a tissue penetrating tip

disposed at an angle relative to the axis, the angle opening in a proximal direction and being of no more than approximately 90 degrees, the tissue penetrating member being operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions in a substantially transverse path with respect to a longitudinal axis of the catheter body.

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125. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular therapeutic catheter having an elongate catheter body, an actuator and a tissue penetrating member with a tissue penetrating tip, disposed at an angle relative to the catheter body, the angle opening in a proximal direction of no more than approximately 90 degrees, the tissue penetrating member being operable coupled to the catheter body and disposed proximate a distal portion of the catheter body, the tissue penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue; and

moving the tissue penetrating member a limited distance from one of the first or second positions in a direction substantially non-parallel to the catheter body to the

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D<sup>15</sup> other of the first or second positions.

132. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and having a tissue penetrating tip disposed at an angle relative to the catheter body, the angle opening in a proximal direction of no more than approximately 90 degrees, the tissue penetrating member being disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position;

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navigating the catheter through vasculature to a treatment site proximate the cardiac tissue to be treated;

moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug comprising a genetic material to the treatment site.

133. (Amended) A method for treating cardiac tissue as in claim 132 wherein the genetic material, when incorporated into the tissue penetrating member, results in the expression of therapeutic materials.

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139. (Amended) A method of treating cardiac tissue as in claim 132 wherein the cardiac tissue is proximate a coronary vessel having a wall and wherein the drug is delivered outside the wall of the coronary vessel.



142. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body and a tissue penetrating member operably coupled to the catheter body and having a tissue penetrating tip disposed at an angle relative to the catheter body, the angle opening in a proximal direction of no more than approximately 90 degrees, the tissue penetrating member being disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

moving the tissue penetrating member from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug comprising glycoprotein or a fragment thereof to the treatment site.

143. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position, and having a tissue penetrating tip disposed at an angle relative to the catheter body, the angle opening in a proximal direction of no more than approximately 90 degrees, and further having an actuator member operably

coupled to the tissue penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

actuating the tissue penetrating member whereby the tissue penetrating member moves from one of the first or second positions in a direction substantially non-parallel to the catheter body to the other of the first or second positions; and

delivering a drug to the treatment site wherein the drug is selected from the group consisting of: a peptide, a protein and a fragment thereof.

147. (Amended) A method for treating cardiac tissue comprising the steps of:

providing an intravascular catheter of the type having an elongate catheter body, a tissue penetrating member operably coupled to the catheter body and disposed proximate a distal portion of the catheter body, the penetrating member having a first non-penetrating position and a second tissue penetrating position, and further having an actuator member operably coupled to the penetrating member and disposed proximate a distal portion of the catheter body for moving the tissue penetrating member from one of the first or second positions to the other of the first or second positions;

navigating the catheter through vasculature to a treatment site proximate the cardiac tissue;

actuating the tissue penetrating member whereby the tissue

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penetrating member moves from one of the first or  
second positions in a direction substantially non-  
parallel to the catheter body to the other of the first  
or second positions; and

delivering a drug comprising a genetic material to the  
treatment site.

Please add new claims 164, 166, 167 and 168 as follows:

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164. (New) The method of claim 132 wherein delivering comprises:  
delivering the drug to myocardium.

166. (New) The method of claim 147 wherein delivering  
comprises:  
delivering the drug to myocardium.

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167. (New) The method of claim 142 wherein delivering a drug  
comprises:  
delivering genetic material.

168. (New) The method of claim 143 wherein delivering a drug  
comprises:  
delivering genetic material.